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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,554	03/28/2001	Xavier Ducloux	PF010030	8997

7590

06/09/2003

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EXAMINER

SENFİ, BEHROOZ M

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 06/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

3/28/01

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Office Action Summary

Application No.

09/819,554

Applicant(s)

DUCLOUX ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 5, and 7 – 8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrew et al. (US 5,428,403) in view of Blawat et al. (US 6,198,878).

Regarding claim 1, Andrew '403 discloses an image being split into panels, one or more panels constituting over the length of the image, horizontal band of the image (Andrew: fig. 4, CM0, CM1), an encoder being assigned to each panel (Andrew: fig. 4, processors DSP), a global regulation, at the level of a band, is implemented as a function of a preset bit rate (Andrew: fig. 2, bits regulation unit, col. 7, lines 24+).

Even though Andrew '403 discloses bits regulator (fig. 3), fails to explicitly disclose bits regulator on the basis of video buffer verifier "VBV".

However, the above claimed limitation is well-known in the art as evidenced by Blawat '878, in particular (Blawat: col. 1, lines 50+) teaches video buffer verifier.

In view of the above teaching, it would have been obvious to one ordinary skill in the art to modify the system of Andrew '403, as taught by Blawat '878 to improve the coding quality (Blawat: col. 1, lines 28).

Regarding claims 2 and 4, combination of Andrew '403 and Blawat '878 teaches cost of Coding (Blawat: col. 2, lines 25+).

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Regarding claim 3, Official Notice: the limitation as claimed “coding cost is calculated on the basis of pre-analysis of the image” is well-known in the prior art of the record. See supporting reference Ducloux et al (US 6,148,107).

Regarding claim 5, the limitations claimed “preset bit rate for horizontal band is in part the preset bit rate for the complete image, dividing by the number of horizontal bands” would have been obvious, since that is the definition of known mathematical equation for finding average, and the “dynamic allocation of the preset bit rate for the complete image depends on the complexity” reads on (Blawat: col. 2, lines 12) bit allocation and global control.

Regarding claim 7, the limitations claimed are substantially similar to claim 1, therefore the grounds for rejecting claim 1 also apply here.

Regarding claim 8, combination of Andrew '403 and Blawat '878 teaches multiplexing bus linking the encoders (Andrew: fig. 2, high-speed bus 202).

Allowable Subject Matter

3. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is an examiner's statement of reasons for allowance:

The prior art of the record fails to anticipate nor rendered obvious the claimed limitation preset bit rate of a horizontal band is equal to: $D_i = (p \cdot x_i/x + (1-p) \cdot n/N) D$,

Where: D_i is the bit-rate of the horizontal band

D is the bit-rate for the global image

X_i is the complexity of the horizontal band

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X is the total complexity of the image

N is the number of panels per horizontal band

N is the total number of panels in the image

P is the percentage of bit-rate assigned to dynamic allocation relative to the global bit-rate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal


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Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. f'

5/27/03


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600